ProbeIT - User Manual

Tivra Technologies, Inc.

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(ProbeIT)

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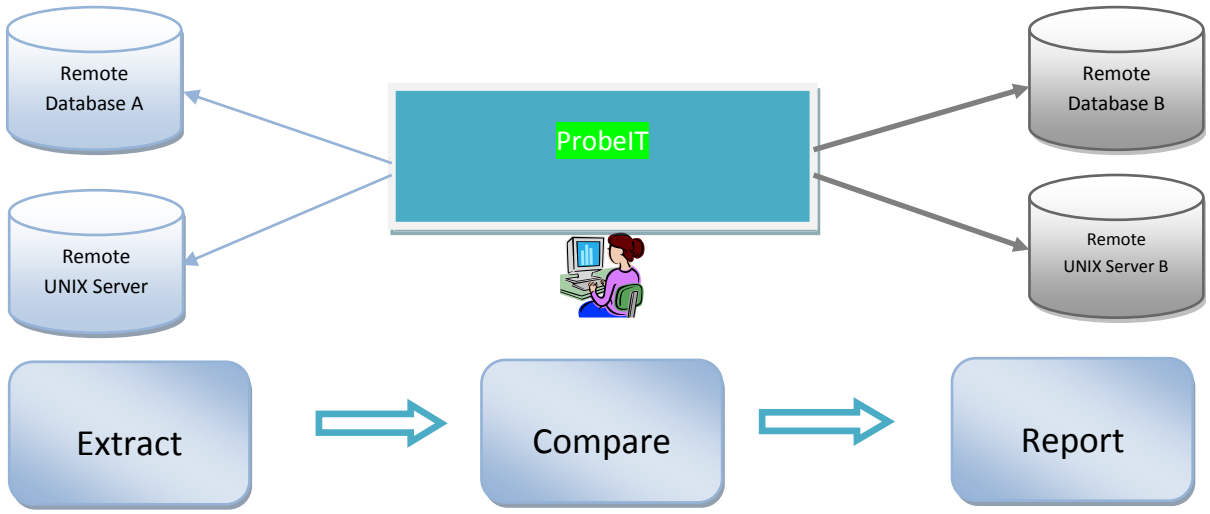
Introduction

ProbeIT is a tool to compare Database objects, setup files, program files to identify the discrepancies.

ProbeIT is used for diagnosing the issues related to missing setup, wrong version of program files or database objects discrepancies. It takes only few minutes to setup & execute otherwise even days is not enough to identify the issues to fix. Typically all development projects outlines process to address such issue but those are manual activities and always prone to have human errors. It takes too much manual efforts for developers in just validating and comparing whether right version is deployed or not on target environment.

a) **Database Objects Comparison** – Helps validating database objects migrated to stage or production environment. This tool connects to two environments simultaneously and generates comparison reports with discrepancy detail.
b) **AOL Object Comparison (applicable to Oracle eBusiness Suite) -** Similar to objects validation, tool connects to source and target environments and generates AOL comparison reports with discrepancy detail.
c) **Data Comparison** – Takes input as SQL query for source & target databases. Extract data, compare attribute by attribute and generates comparison reports with discrepancy detail.
d) **File Comparison** – Tool compare all files including executable hosted on application servers. It connects to UNIX servers, reads file properties and generate reports.



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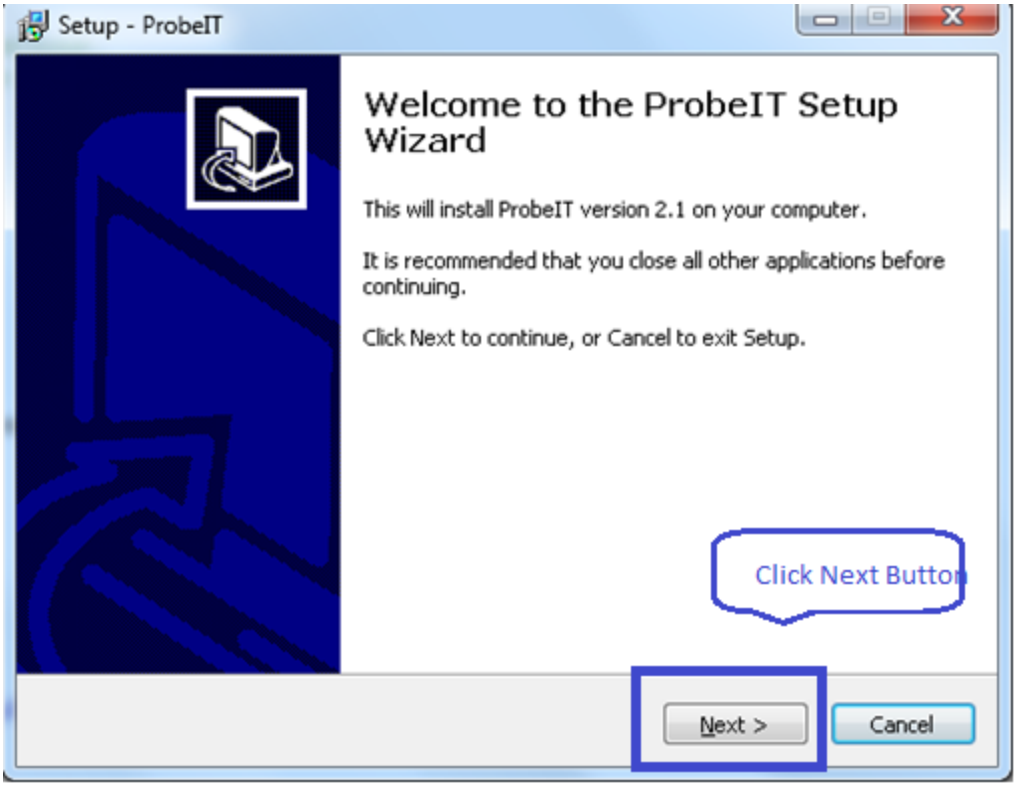
System Requirements

Windows 7, JRE 1.7 or above

Installation

1) Download installable and double click the ProbeIT_setup.exe
2) Click “Next” button


Setup - ProbeIT
Welcome to the ProbeIT Setup Wizard
This will install ProbeIT version 2.1 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Click Next Button
Next >
Cancel

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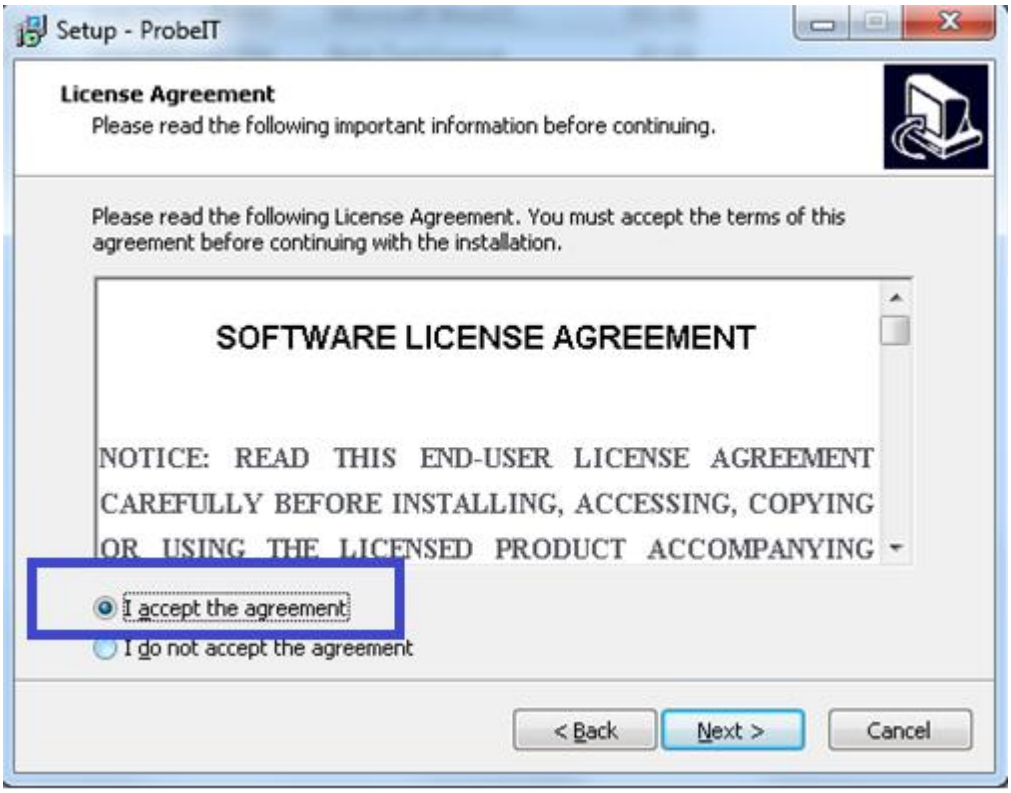
3) Accept "Software License Agreement"


Setup - ProbeIT
License Agreement
Please read the following important information before continuing.
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.
SOFTWARE LICENSE AGREEMENT
NOTICE: READ THIS END-USER LICENSE AGREEMENT CAREFULLY BEFORE INSTALLING, ACCESSING, COPYING OR USING THE LICENSED PRODUCT ACCOMPANYING
I accept the agreement
I do not accept the agreement
< Back
Next >
Cancel

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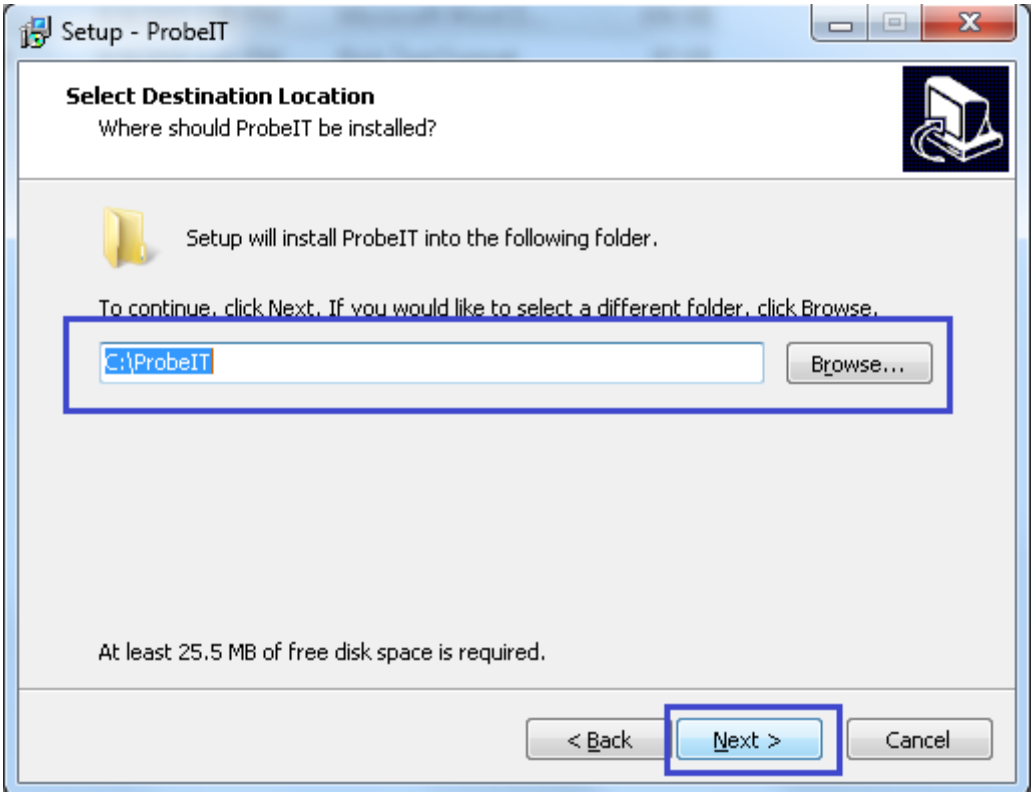
4) Chose installation path or keep it default and click “Next” button


Setup - ProbeIT
Select Destination Location
Where should ProbeIT be installed?
Setup will install ProbeIT into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\ProbeIT
Browse...
At least 25.5 MB of free disk space is required.
< Back
Next >
Cancel

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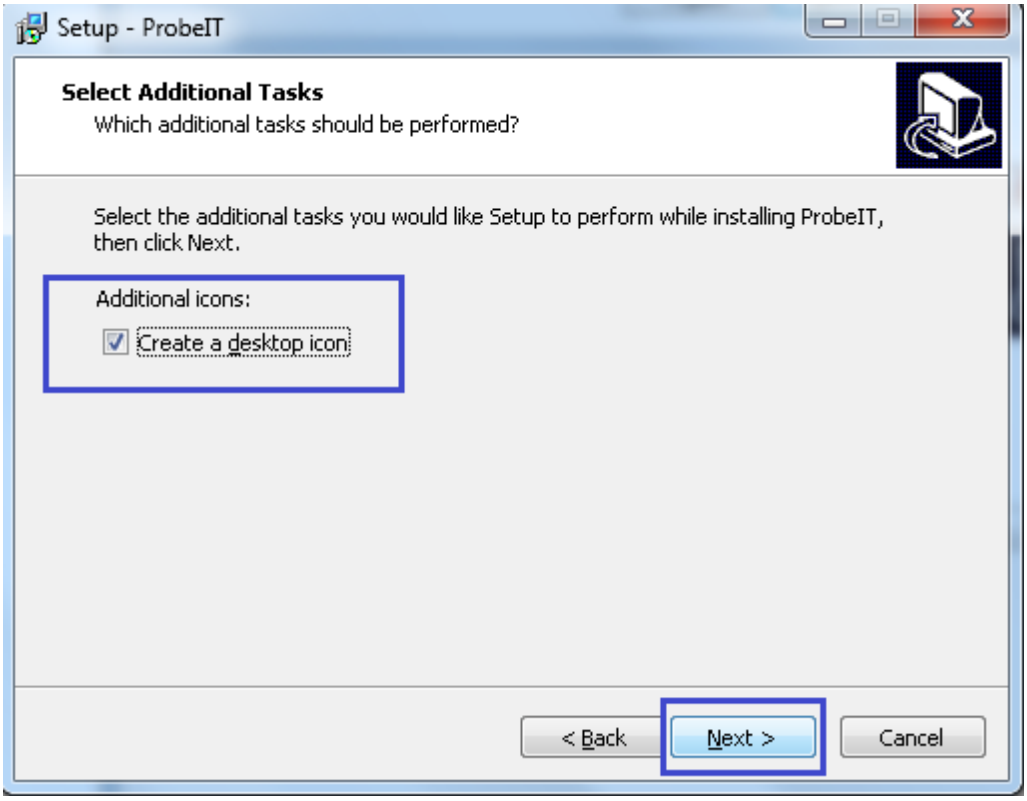
5) Select check box “Create a desktop icon” optionally and click “Next” button


Setup - ProbeIT
Select Additional Tasks
Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing ProbeIT, then click Next.
Additional icons:
Create a desktop icon
< Back
Next >
Cancel

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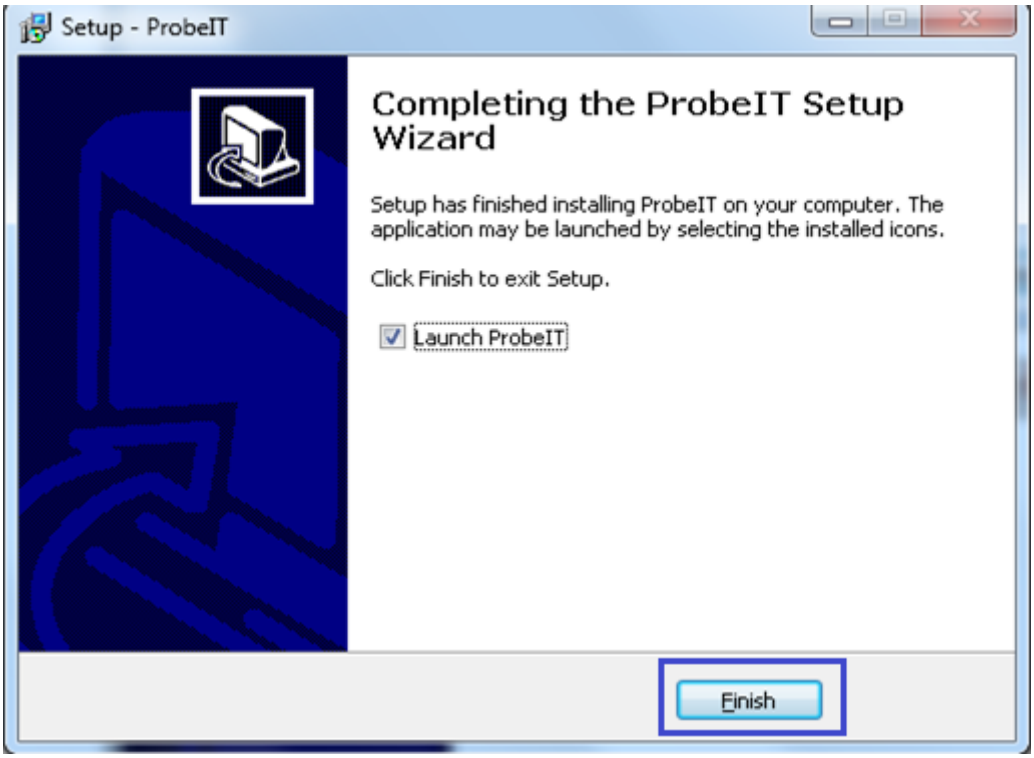
6) Click Finish button


Setup - ProbeIT
Completing the ProbeIT Setup Wizard
Setup has finished installing ProbeIT on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Launch ProbeIT
Finish

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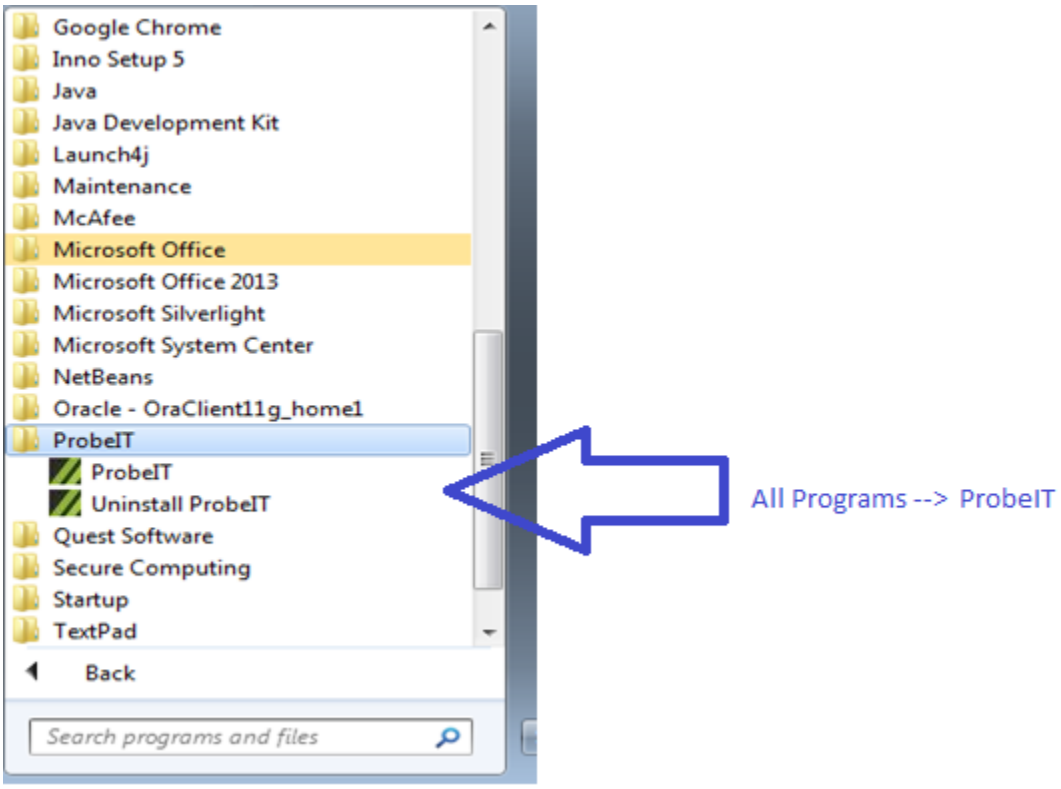
7) ProbeIT will be added in the start Menu as well as a shortcut icon (if you opted while installation) on the desktop.



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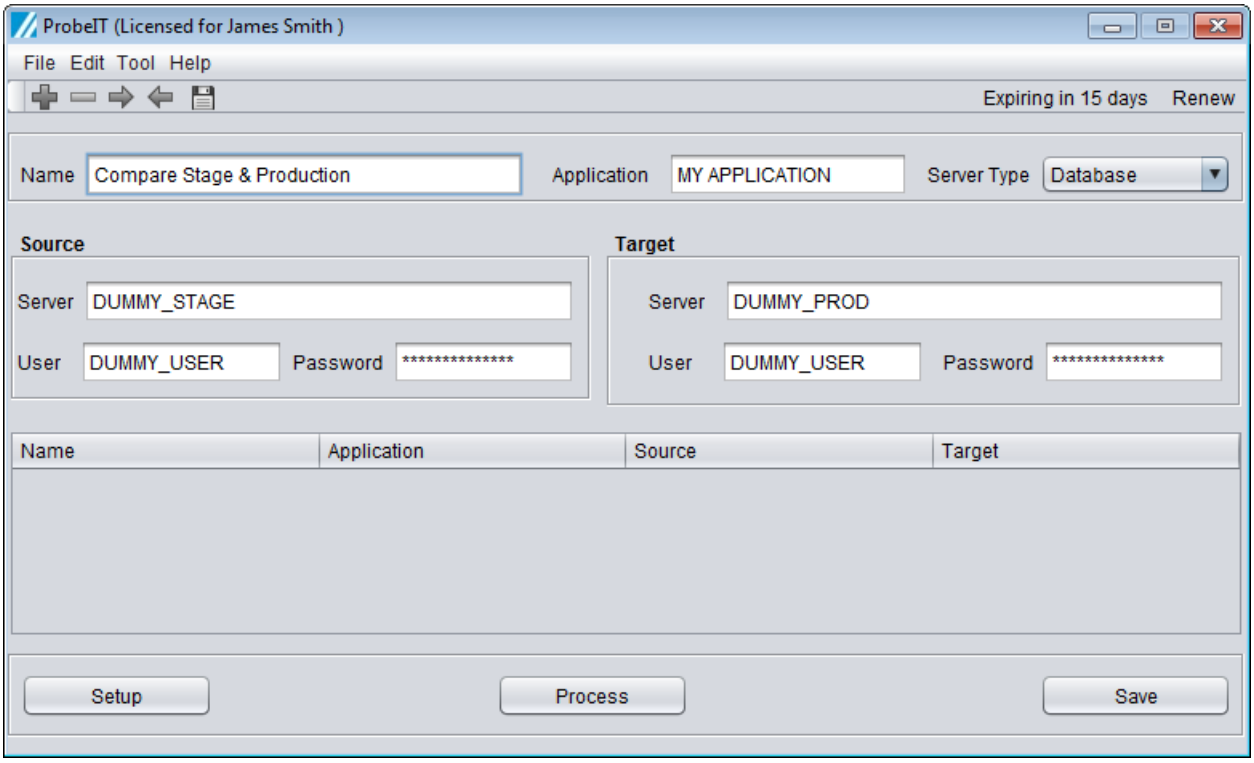
Configuration

Once successfully installed, double click the ProbeIT shortcut icon. It will launch the application with some dummy data as below.



Main Window

On this page you configure environment detail. Source database and target database.

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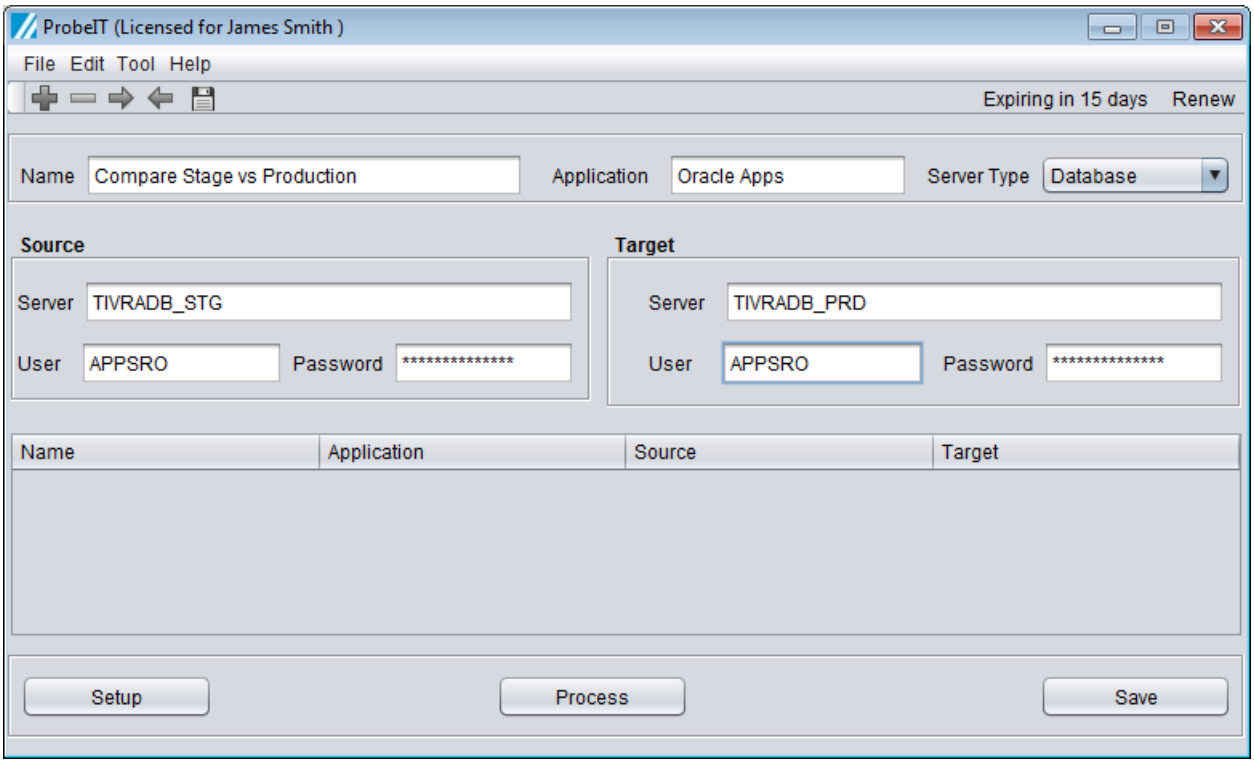

1. Enter “Name” any meaningful text relevant to your use case.
2. Enter name of the application. You can enter anything which relate to your application
3. Choose Database or UNIX depending on your use case. If you want compare information stored in the database choose database. If you want to compare physical files kept on UNIX boxes choose UNIX.
4. Enter Source server detail. Connect String , User & Password
5. Enter Target server detail. Connect String , User & Password
6. Click “Save” button. It will try to do a test connection with your source and target databases to make sure credential entered is correct and finally store the information. If unable to connect, it will display error message.

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Setup Window

After completing Main Window click “Setup” button to setup your search criteria based on which tool is going to run the comparison and generate the report. Setup Window has 4 tab pages. DB Objects, AOL, Data and Files.

DB Objects

This window enables you to setup database object search criteria to compare the definition of below database object definition.

There are two ways to define the search criterai. Pattern Search or upload list of object from excel sheet.

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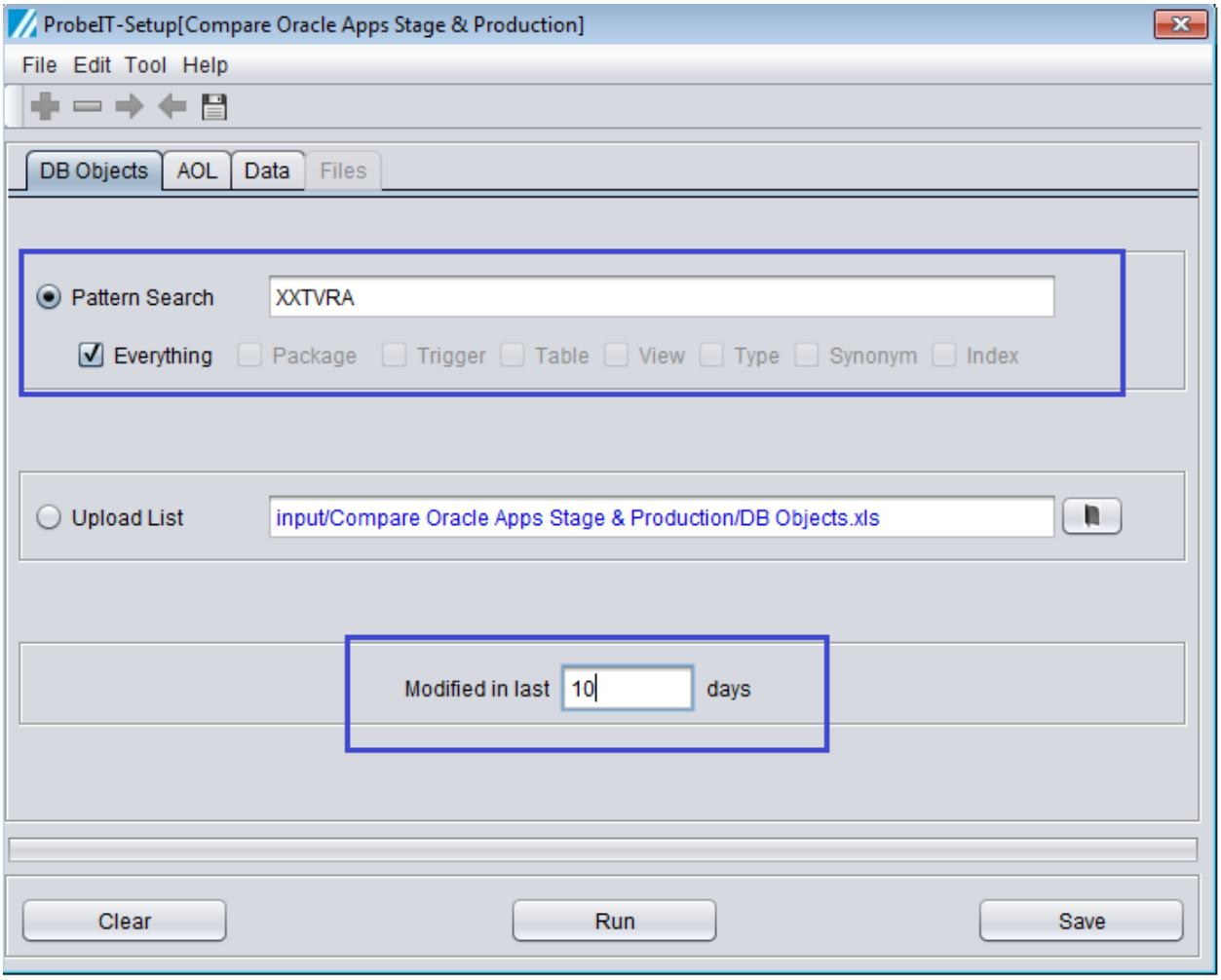
Pattern Search

In this option you enter search pattern.

1. **Search Text:** Partial information about your objects. Suppose you want to compare all objects which contains XXTVRA in the name Enter your criteria. You can use regular expression to refine the search condition. You can use check boxes to further restriction e.g. if you want to just compare Package or trigger or table select the check box accordingly.
2. **Modified in last <XX> days:** This field allows you further restrict the search criteria based on last modified if you want to compare object which are changed in last 10 days. You enter 10



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File Upload

If you have list of objects in an xls sheet, you can choose Upload List option. Make sure you are upload .xls file. In case you have xlsx file convert it to .xls and then upload. Excel file should be in below format in excel sheet. Column A – Object Name and Column – B Object Type

A	B
Object Name	**Object Type**
OE_ORDER_HEADER_ALL	TABLE
OE_ORDER_PUB	PACKAGE
OE_ORDER_LINES_ALL	TABLE
XX_BOOKING_VALIDATION_PKG	PACKAGE

These are the valid object type which can be entered in the excel sheet.

PACKAGE	PROCEDURE	FUNCTION
TRIGGER	VIEW	PACKAGE BODY
TABLE	INDEX	SEQUENCE
SYNONYM	MATERIALIZED VIEW	TABLE PARTITION
QUEUE		

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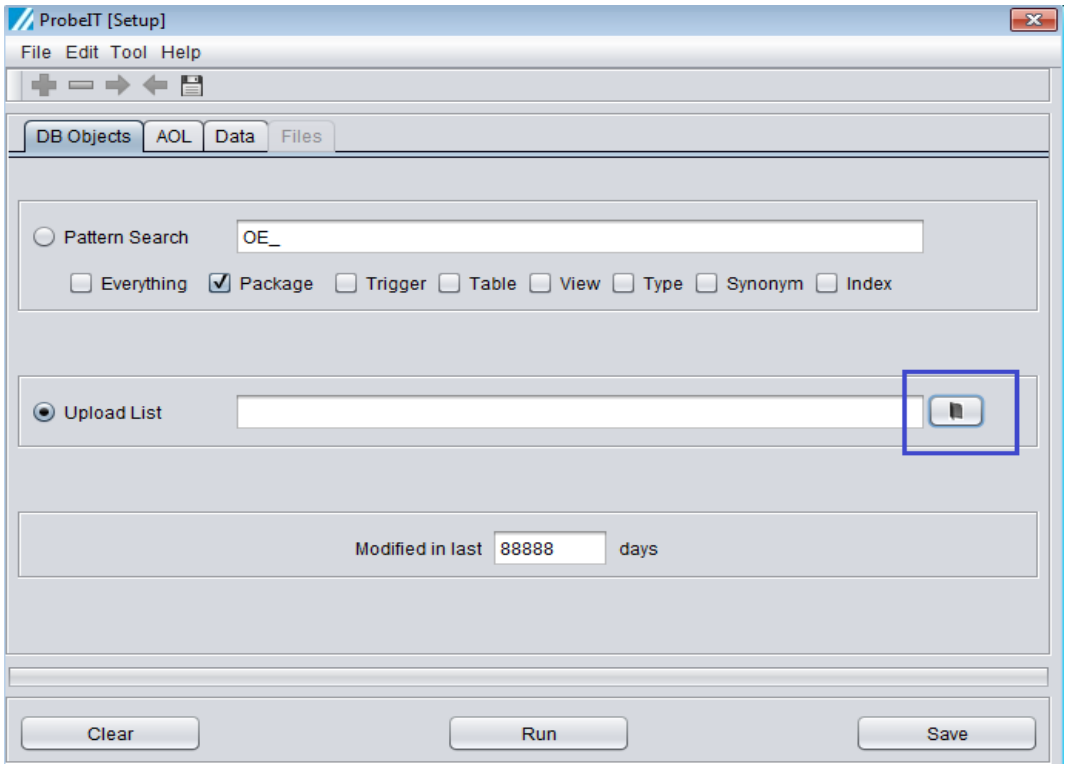
1. Click File chooser button



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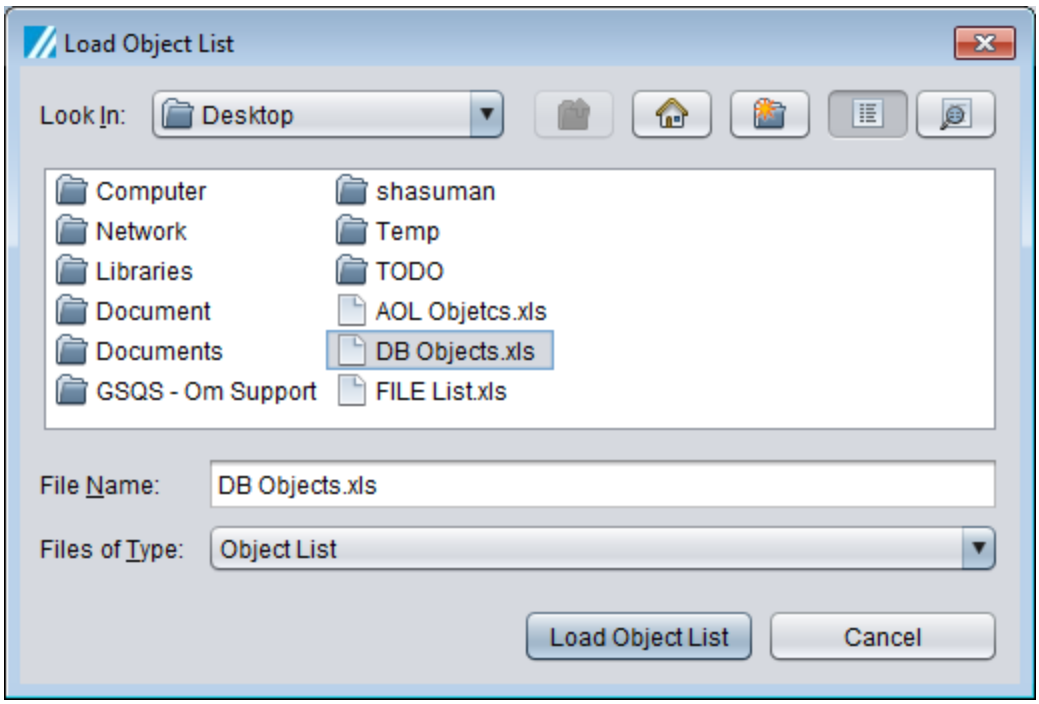
2. Choose file as shown below



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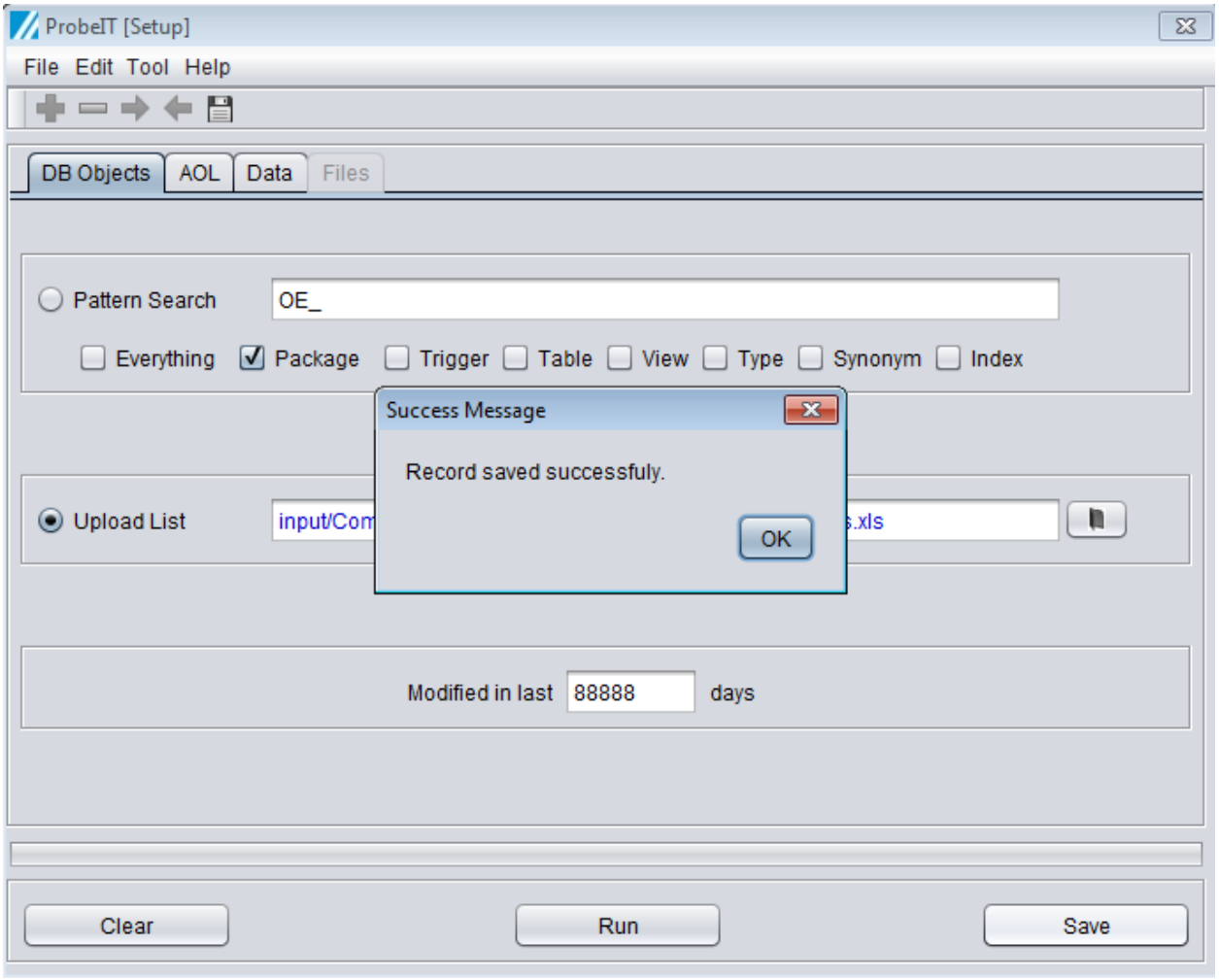
3. Click Save button



AOL

This page is specific to Oracle Apps related to setup validation e.g. Lookup , Value Sets, Profile options etc.

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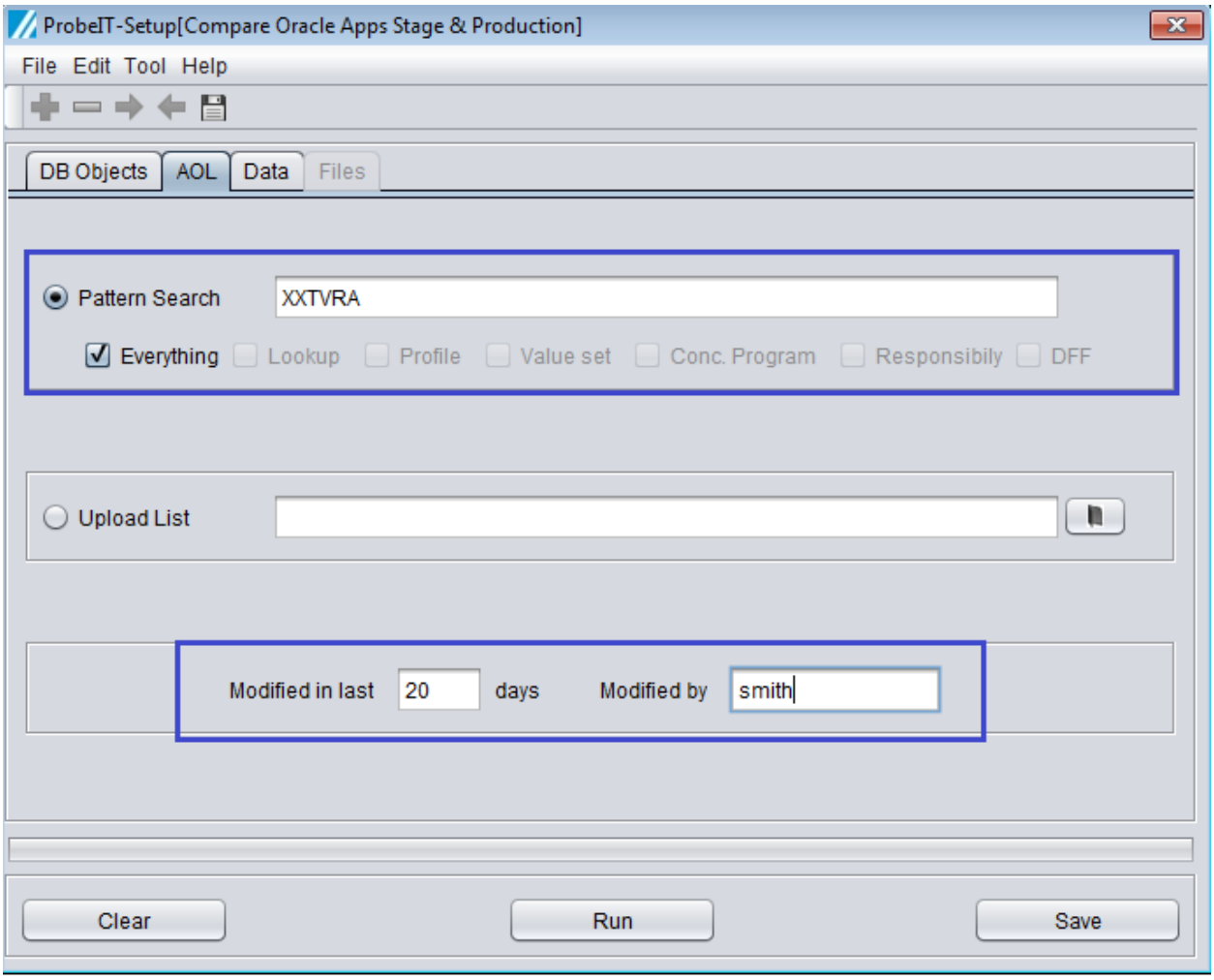

Pattern Search

a) Choose either “Pattern Search” or “Upload AOL List”
b) In case of Pattern search you can choose specific AOL type
c) Click save button.
d) Run

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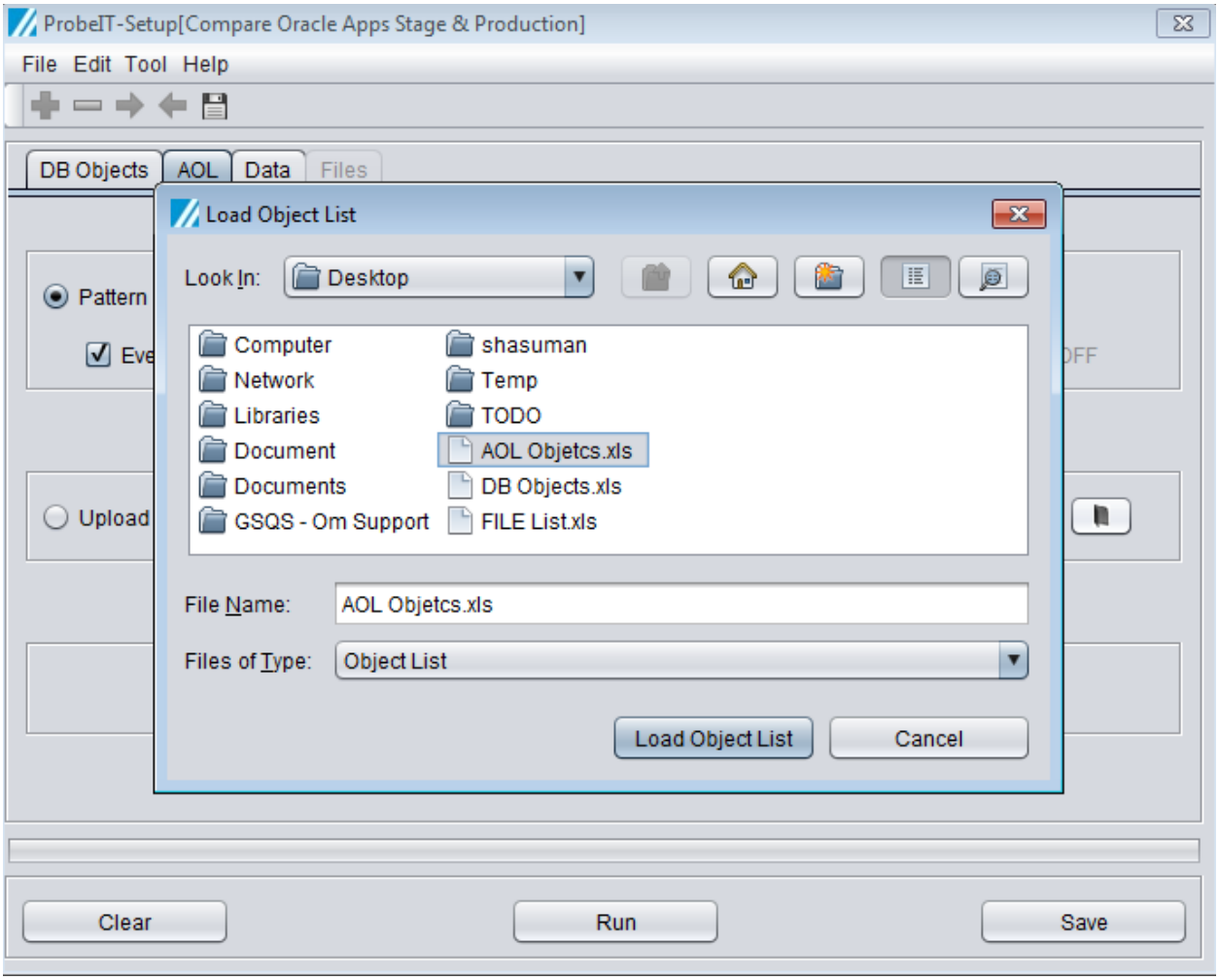
File Upload

You can upload your list of objects using excel sheet. These are valid object type.



Lookup	Profile	Value Set
Concurrent Program	Request Group	DFF
Menu	Message	Request Set
Responsibility	Form Function	Form Personalization
Menu Entry	Business Event	Conc. Program Parameters

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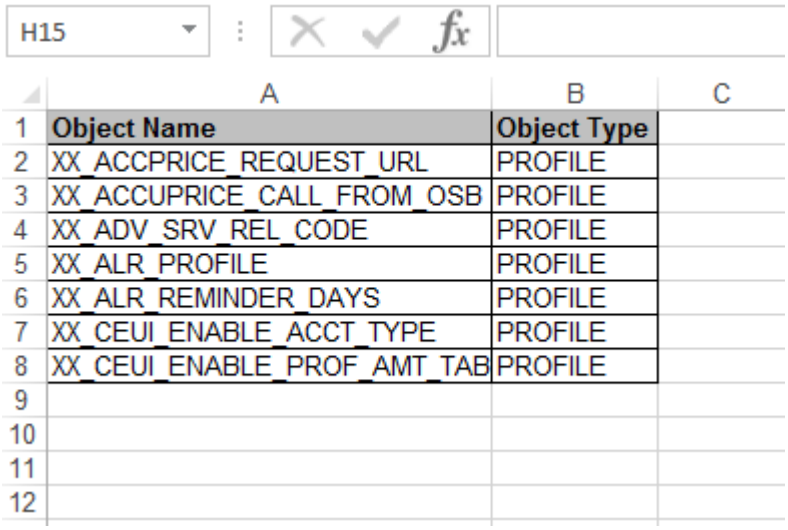

	A	B	C
1	**Object Name**	**Object Type**	
2	XX_ACCPRICE_REQUEST_URL	PROFILE	
3	XX_ACCUPRICE_CALL_FROM_OSB	PROFILE	
4	XX_ADV_SRV_REL_CODE	PROFILE	
5	XX_ALR_PROFILE	PROFILE	
6	XX_ALR_REMINDER_DAYS	PROFILE	
7	XX_CEUI_ENABLE_ACCT_TYPE	PROFILE	
8	XX_CEUI_ENABLE_PROF_AMT_TAB	PROFILE	
9			
10			
11			
12			

In case of any discrepancy specific attribute and status cell will be highlighted in red as below.

Sample Report Output

	A	B	C	D	E	F	G	H	I
1	**Environm**	**Status**	**applicatio**	**lookup_type**	**lookup_co**	**meaning**	**descriptio**	**tag**	**start_date**
2	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create DV	Create Mo	DV1CG1	01-JAN-52
3	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create DV	Create Mo	DV1CG1	01-JAN-52
4	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS1	Create Mo	TS1CG1	01-JAN-52
5	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS1	Create Mo	TS1CG1	01-JAN-52
6	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS2	Create Mo	TS2CG1	01-JAN-52
7	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS2	Create Mo	TS2CG1	01-JAN-52
8	TS4EBS	FAILED	-						
9	TS3EBS	FAILED	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS1	Create Mo	TS3CG1	01-JAN-52
10	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	EAV	EAV	Address V	CG1PRD	01-JAN-52
11	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	EAV	EAV	Address V	CG1PRD	01-JAN-52
12	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	EAV_DV1	EAV DV1	Address V	DV1CG1	01-JAN-52
13	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	EAV_DV1	EAV DV1	Address V	DV1CG1	01-JAN-52

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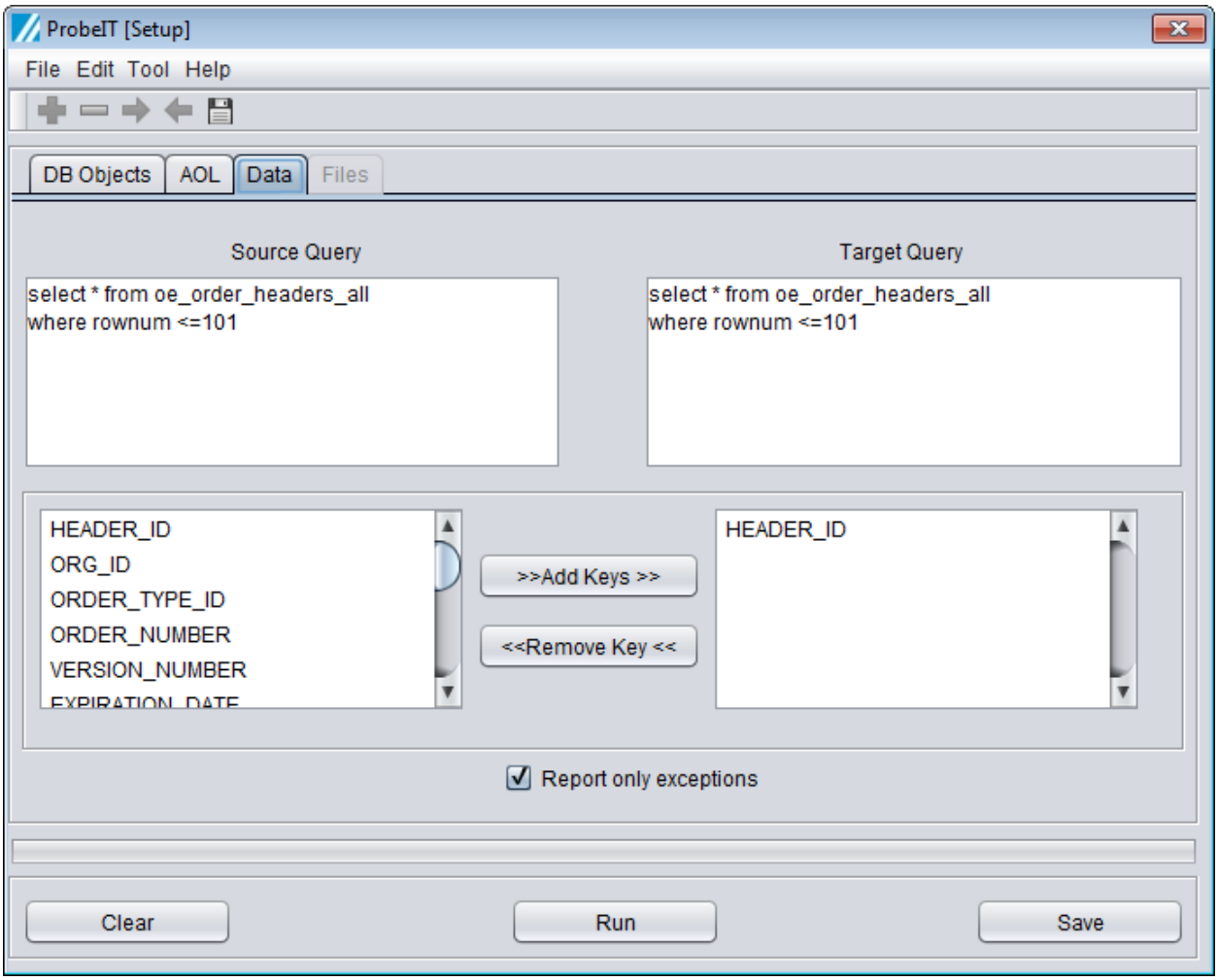
Data

You can write your own query and run to generate report to compare information available in two database.



a) Enter query which will get executed on Source database
b) Enter query which will get executed on target database
c) Click save button

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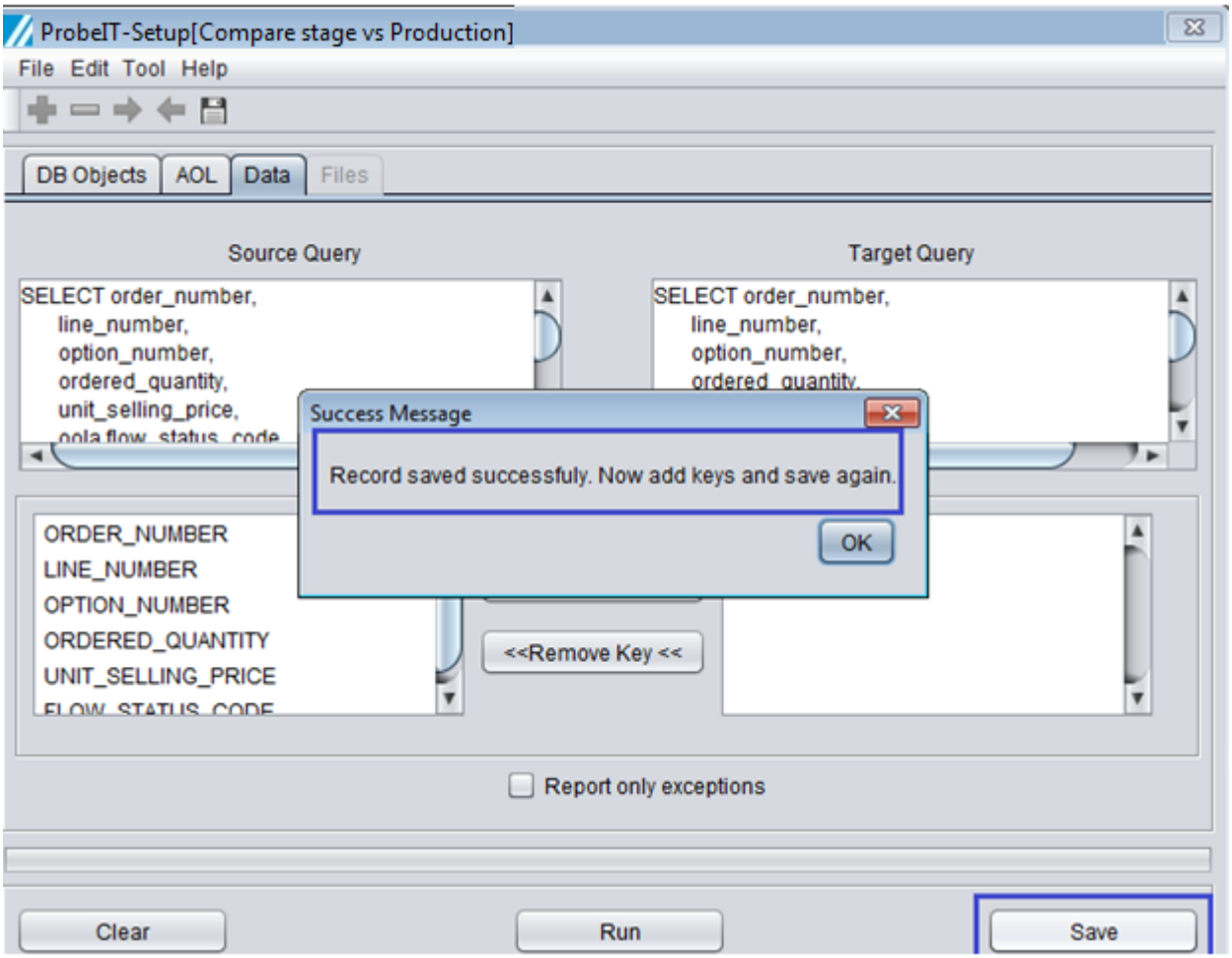

d) Message will be displayed, “Record saved successfully. Now add keys and save again.

e) Select list of keys which makes record unique and click add keys button and click save button.

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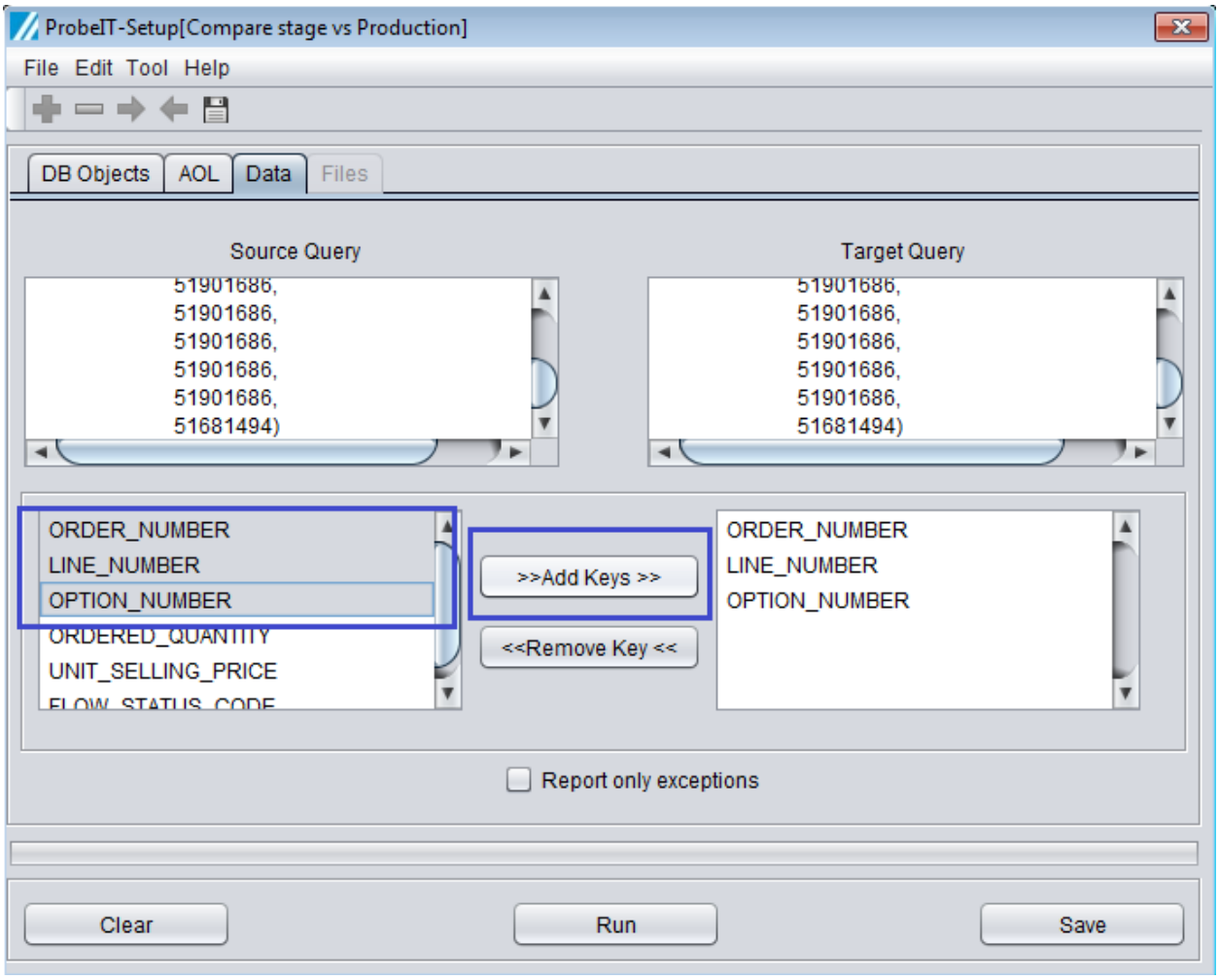

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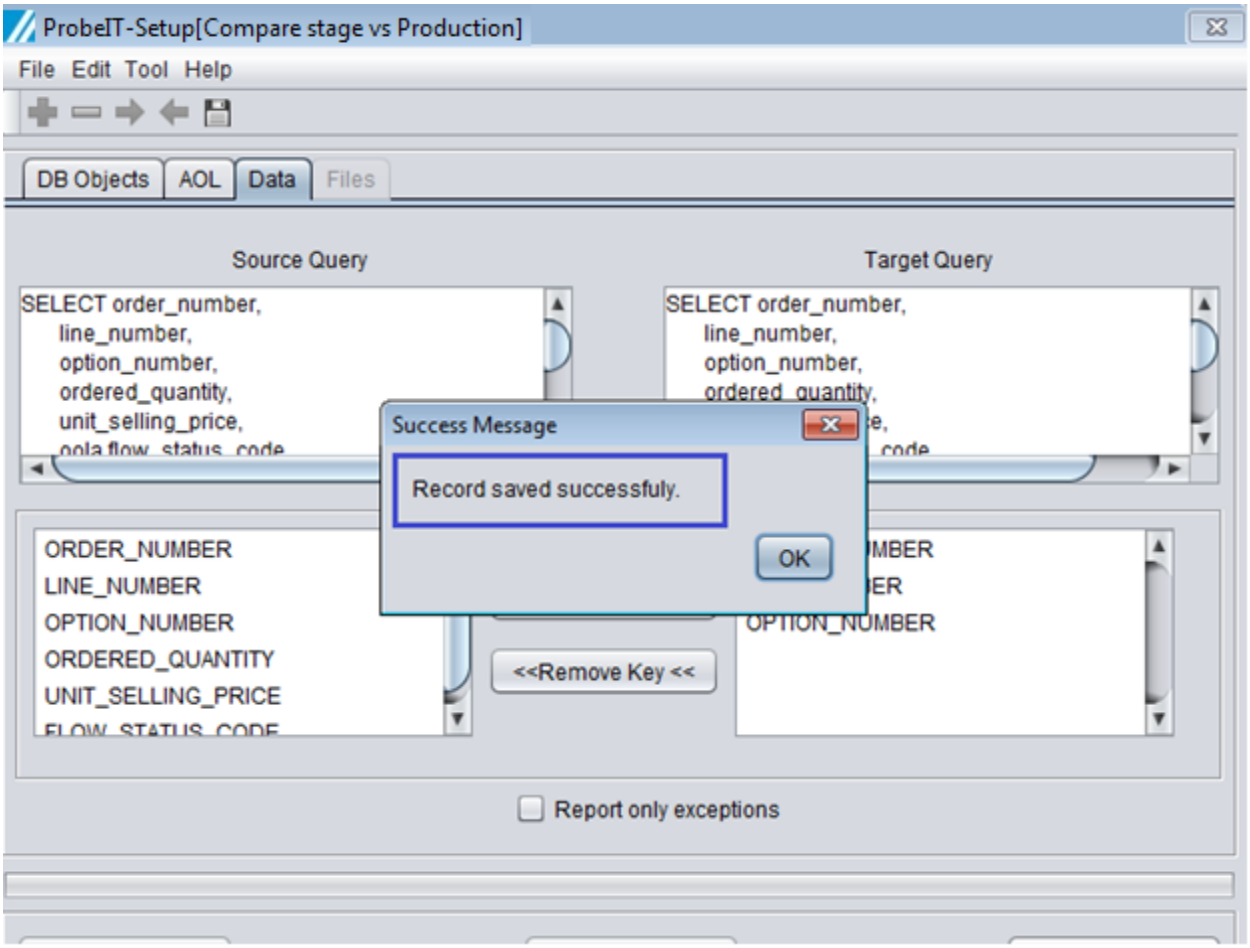

f) Click save button

g) If you are going to have more than 65 thousands records in the report check "Report only exceptions", so that only records with discrepancy will be generated.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	ENVIRONMENT	STATUS	HEADER_	ORG_ID	ORDER_T	ORDER_N	VERSION	ORDER_S	ORDERED	REQUEST	PRICING_	SHIPMEN	DEMAND_	PRICE
2	Database1	SUCCESS	30219	161	700042	51863922	0	1062	2012-06-05	2012-06-19	null	null	DEFAULT	1108
3	Database2	SUCCESS	30219	161	700042	51863922	0	1062	2012-06-05	2012-06-19	null	null	DEFAULT	1108
4	Database1	SUCCESS	30267	161	700042	51568572	0	1063	2012-03-08	2012-05-21	null	null	DEFAULT	1109
5	Database2	SUCCESS	30267	161	700042	51568572	0	1063	2012-03-08	2012-05-21	null	null	DEFAULT	1109
6	Database1	SUCCESS	30270	161	700042	51800946	0	1062	2012-05-16	2012-05-18	null	null	DEFAULT	1109
7	Database2	SUCCESS	30270	161	700042	51800946	0	1062	2012-05-16	2012-05-18	null	null	DEFAULT	1109
8	Database1	SUCCESS	30285	161	700042	51906692	0	1065	2012-06-18	2012-06-20	null	null	DEFAULT	1134
9	Database2	SUCCESS	30285	161	700042	51906692	0	1065	2012-06-18	2012-06-20	null	null	DEFAULT	1134
10	Database1	FAILED	9209	161	700042	51544976	0	1042	2012-02-29	2012-03-14	null	null	DEFAULT	1109
11	Database2	FAILED	9209	161	700042	51544976	0	1042	2012-02-29	2012-03-14	1	null	DEFAULT	1109
12														

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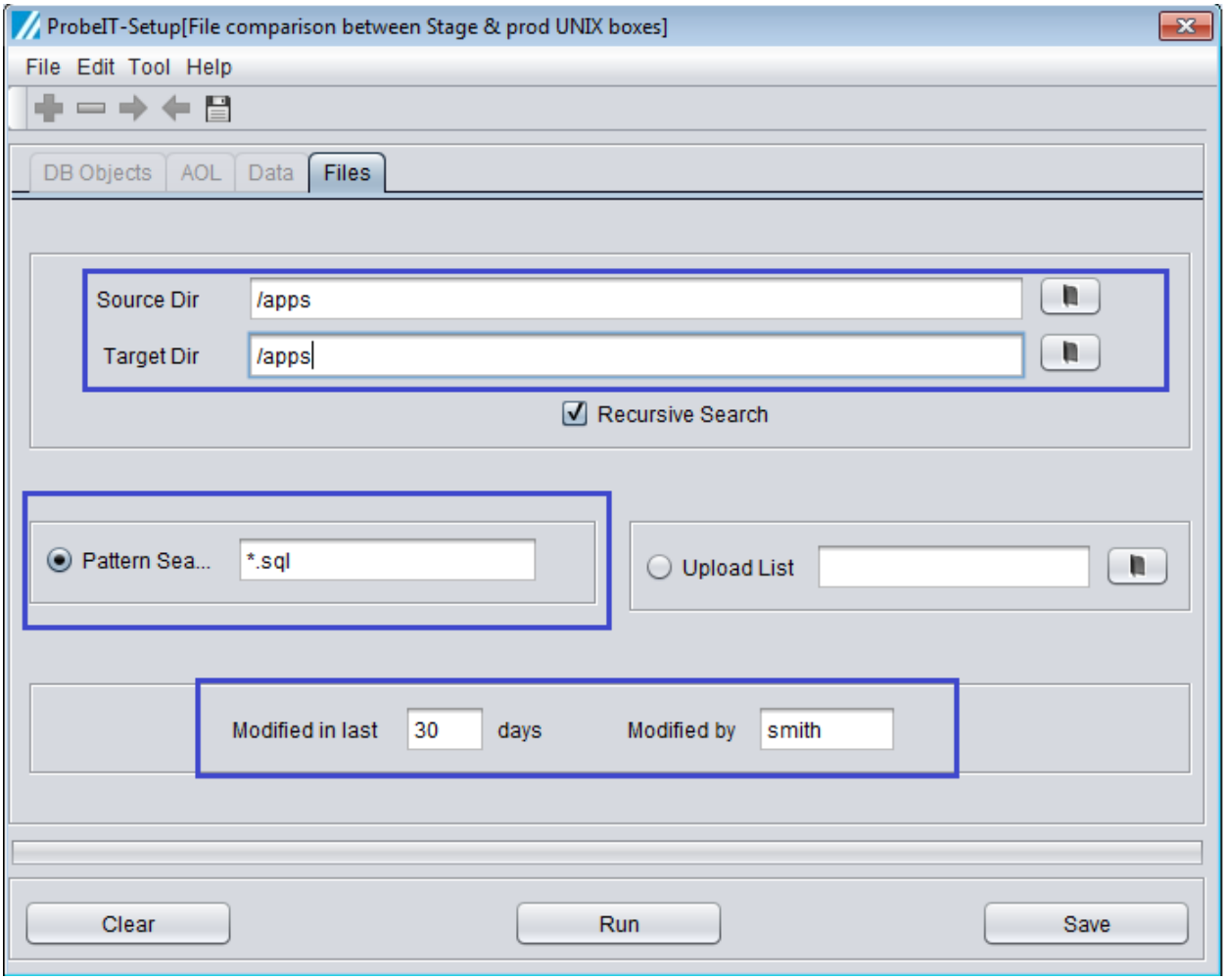
Files

Use this page if you want to compare physical files on two UNIX boxes.



Pattern Search

1) Enter Source directory & Target Directory.

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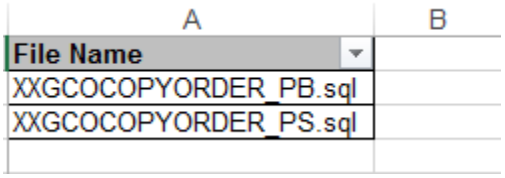
2) Choose “Pattern Search”
3) Enter values for modified in last xx days and modified by, you can ignore these fields in case you want to scan all files.
4) Click “Save” Button

File Upload

1) Enter Source directory & Target Directory.
2) Choose “Upload File” Radio Button and upload file in below format.



	A	B
	File Name	
	XXGCOCOPYORDER_PB.sql	
	XXGCOCOPYORDER_PS.sql	

3) Enter values for modified in last xx days and modified by, you can ignore these fields in case you want to scan all files.
4) Click “Save” Button

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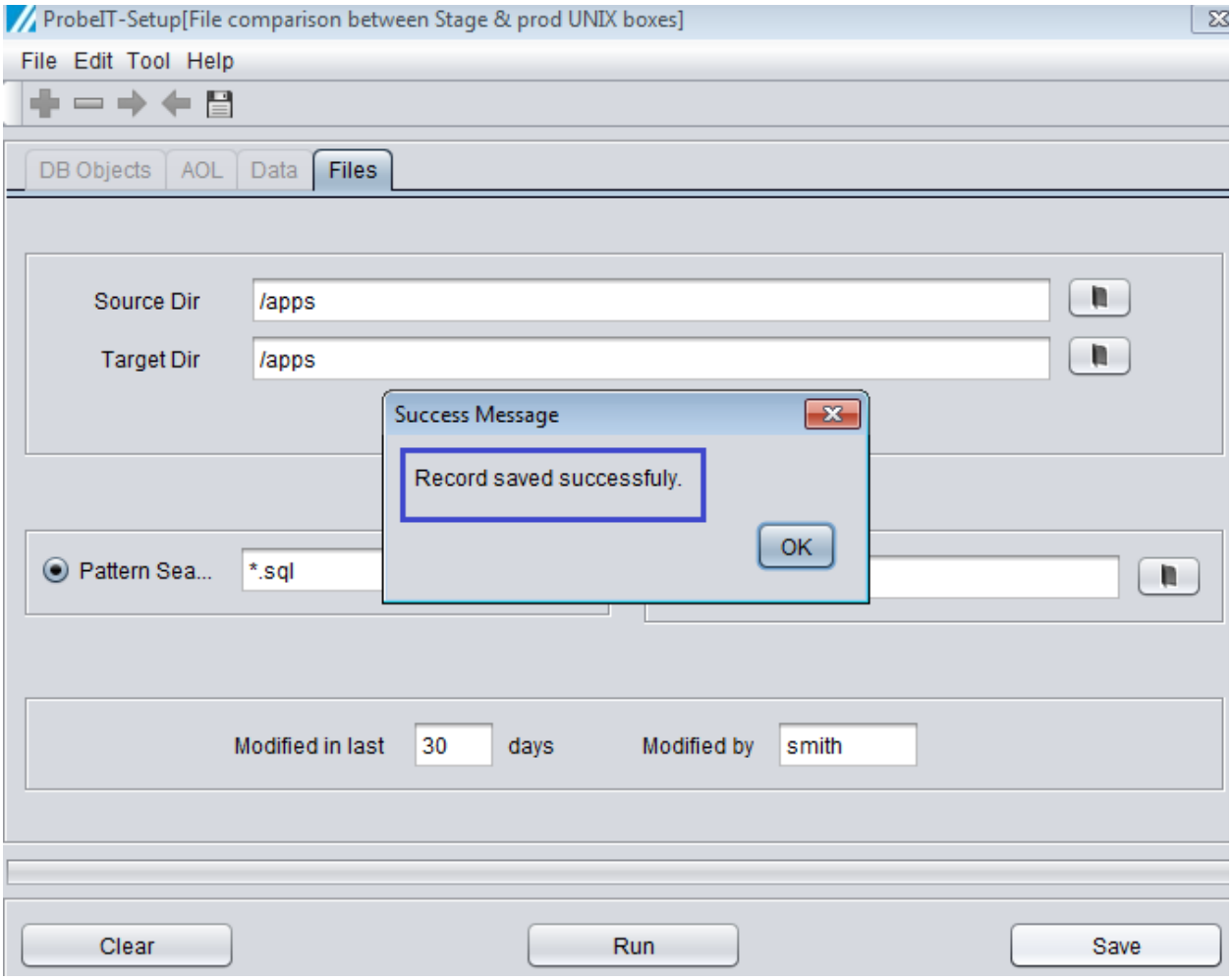

In case of any discrepancy specific attribute and status cell will be highlighted in red as below.

	A	B	C	D	E	F	G	H	I	J	K	L
1	Server	Status	Sub Dir	File Type	File Name	Path	Permissio	File Owne	Last Modi	File Size	MD5 Chec	Comments
2	Unix-host-1	FAILED	.	SQL	TestScript.sql	/users/sha	-rw-r--r--	shasuman	2014-02-09	1868	1ebbb58b0	
3	Unix-host-2	FAILED	.	SQL	TestScript.sql							
4	Unix-host-1	SUCCESS	.	SQL	XXCOPYORDER_PB.sql	/users/sha	-rw-r--r--	shasuman	2014-02-09	22200	603ec2175	
5	Unix-host-2	SUCCESS	.	SQL	XXCOPYORDER_PB.sql	/users/sha	-rw-r--r--	shasuman	2014-02-09	22200	603ec2175	
6	Unix-host-1	SUCCESS	.	SQL	XXCOPYORDER_PS.sql	/users/sha	-rw-r--r--	shasuman	2014-02-09	6218	75c2ceeaa	
7	Unix-host-2	SUCCESS	.	SQL	XXCOPYORDER_PS.sql	/users/sha	-rw-r--r--	shasuman	2014-02-09	6218	75c2ceeaa	
8	Unix-host-1	SUCCESS	.	SQL	copyorder.sql	/users/sha	-rw-r--r--	shasuman	2014-02-08	3533	b8d35e9ca	
9	Unix-host-2	SUCCESS	.	SQL	copyorder.sql	/users/sha	-rw-r--r--	shasuman	2014-02-08	3533	b8d35e9ca	
10	Unix-host-1	FAILED	.	SQL	runSQL.sql	/users/sha	-rw-r--r--	shasuman	2014-02-08	3533	b8d35e9ca	
11	Unix-host-2	FAILED	.	SQL	runSQL.sql	/users/sha	-rw-r--r--	shasuman	2015-04-22	103	7feed6c9a	
12												

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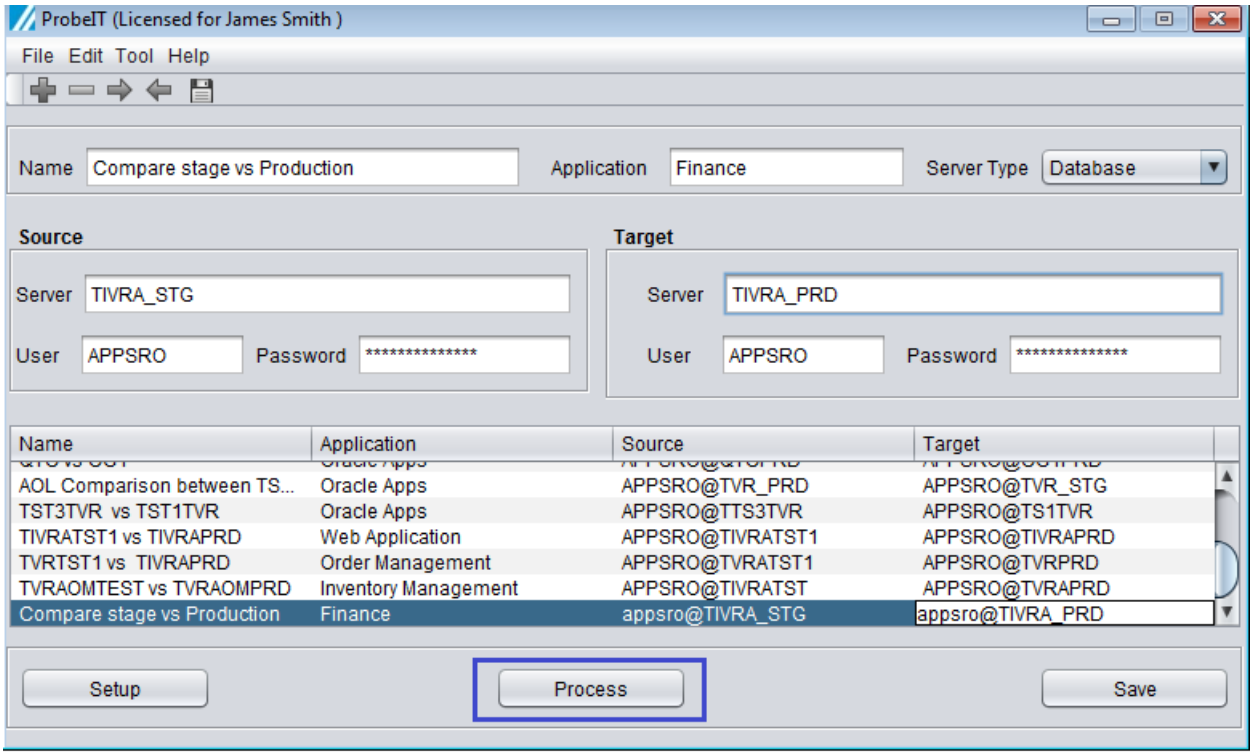
Reports

Generation

1) Go main window, close setup window in case you are still on setup window
2) Select all rows in the table for which you want to generate report
3) Click “Process” button



4) Execution window will be launched.
5) Click “Run” button

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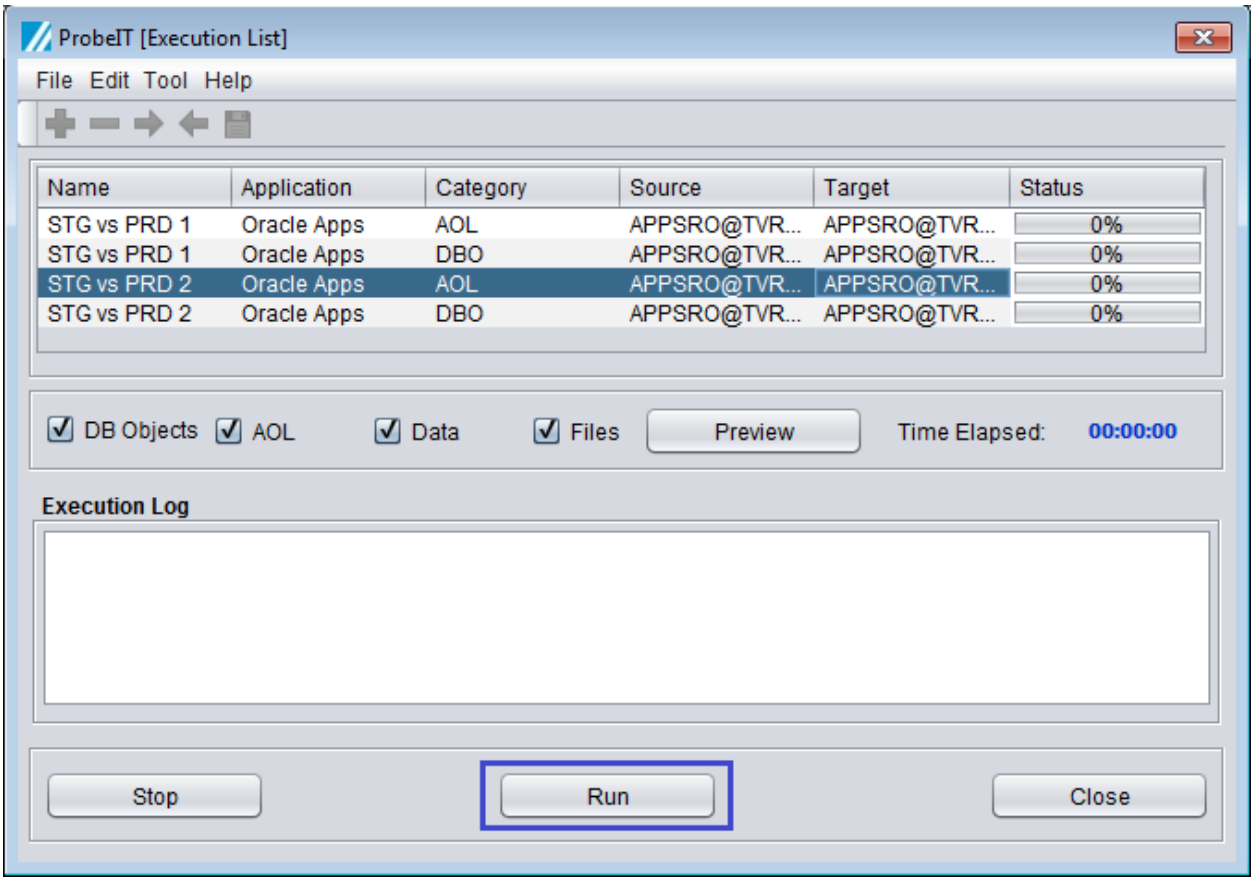

6) Once report is generated you can click hyper link on progress bar

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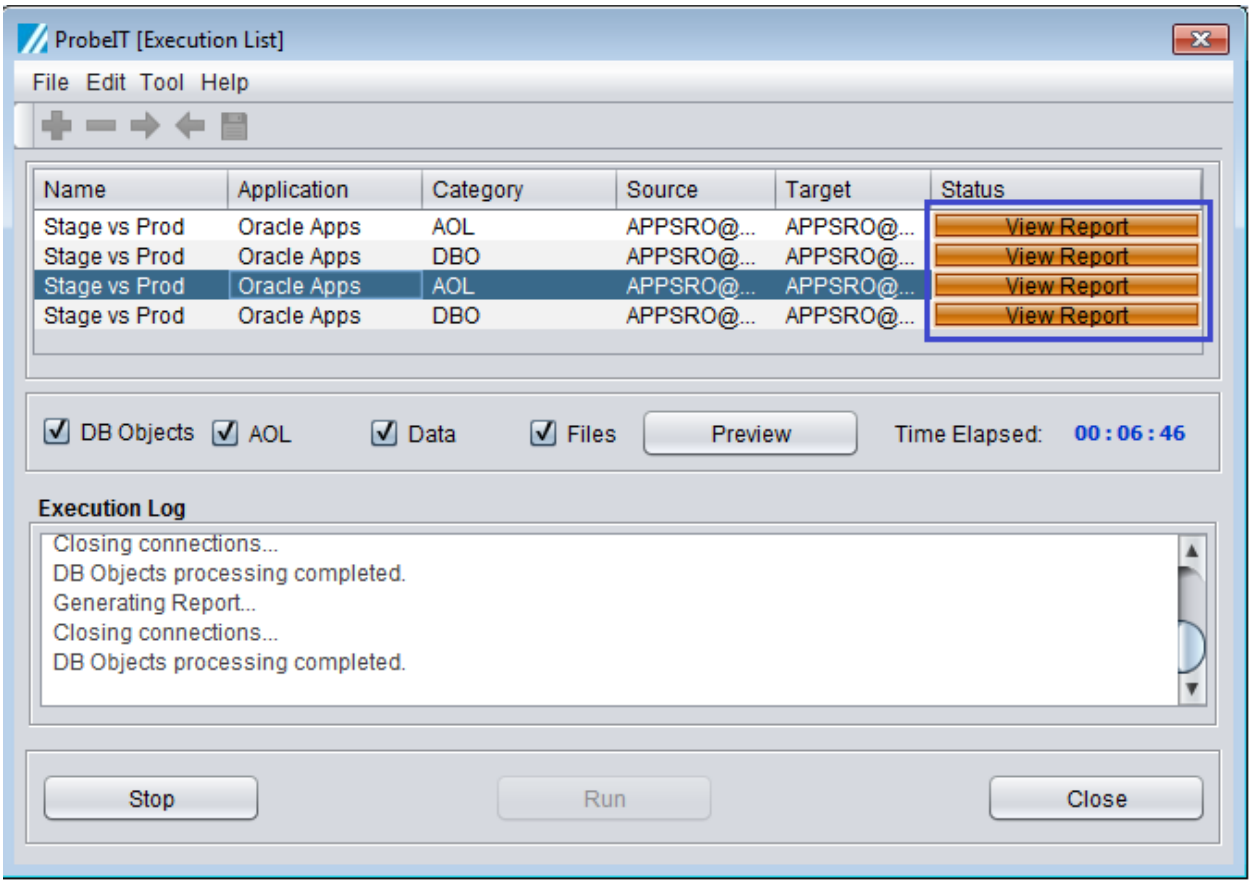

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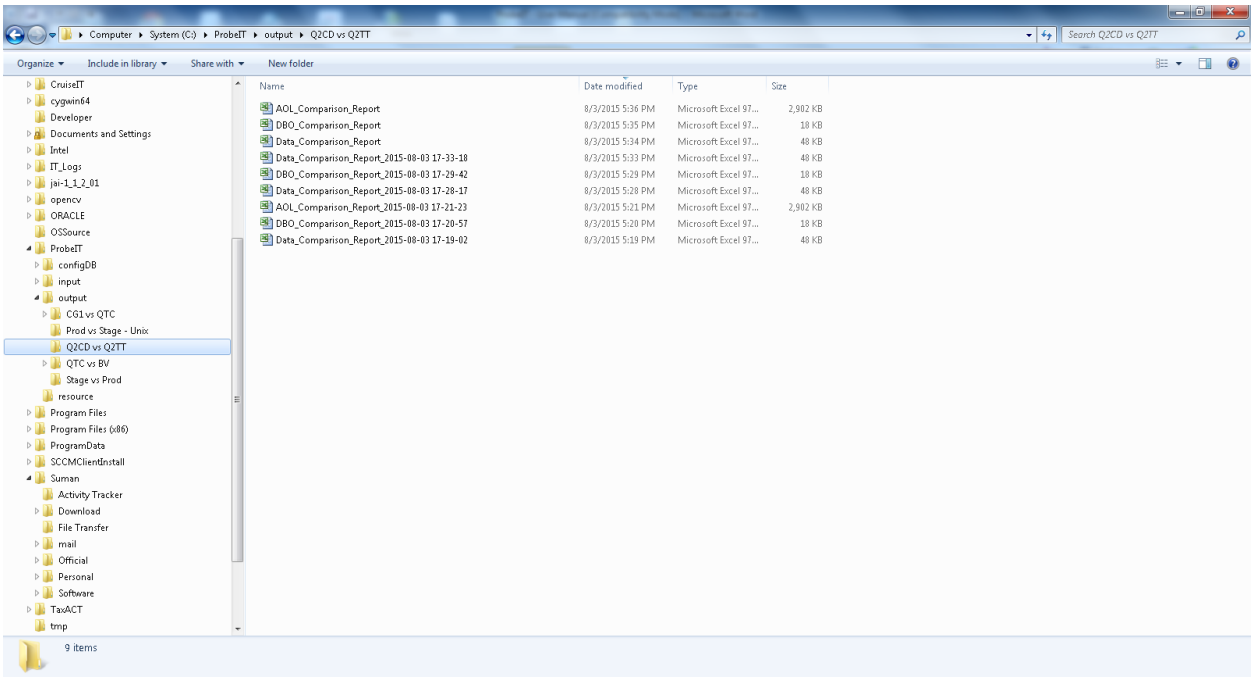
Alternatively you can access report files from ProbeIT/output/<Setup Name> and click “Open Comparison Report” where generated excel report can be found in the output folder.



Viewing

Report is generated under “<Installation Path>/ProbeIT/output” folder. Folder Name will be same as the name you created during configuration.

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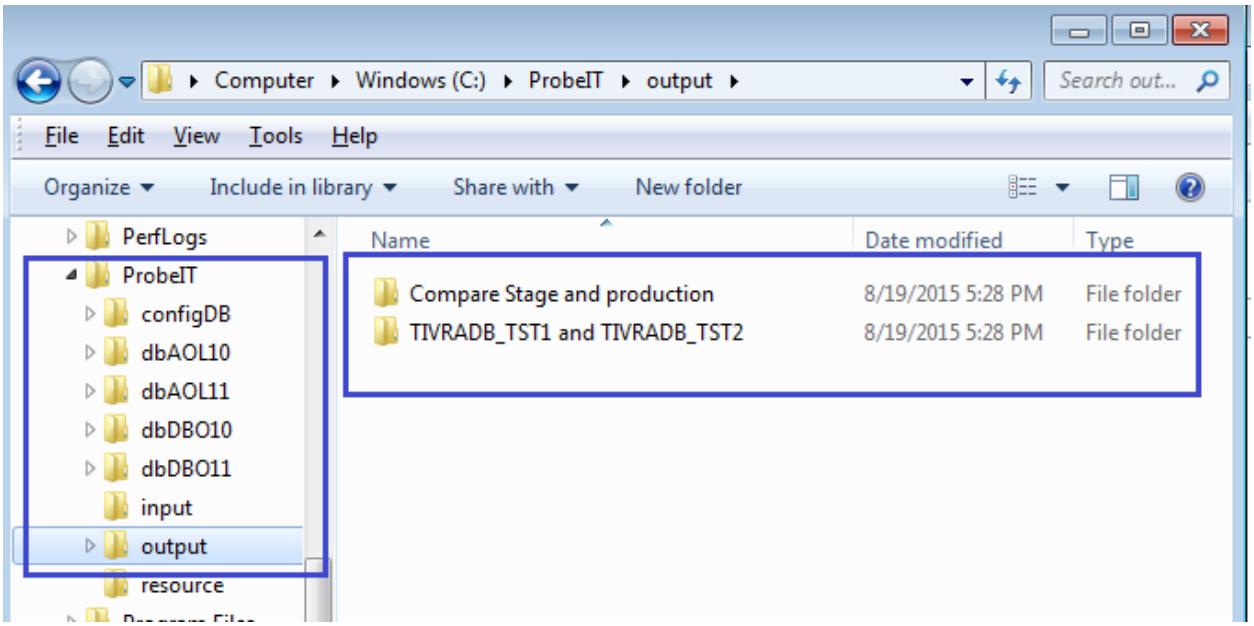

In the report you will see comparison records in two rows first row from source database and second row from target database. If both records are identical Status column will show SUCCESS highlighted in green color. In case of any discrepancy status column will show FAILED highlighted in red. Additionally cell with discrepancy will get highlighted in red color so that you can easily the attributes.

	A	B	C	D	E	F	G	H	I
1	Environm	Status	applicatio	lookup_type	lookup_co	meaning	descriptio	tag	start_date
2	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create DV	Create Mo	DV1CG1	01-JAN-52
3	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create DV	Create Mo	DV1CG1	01-JAN-52
4	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS1	Create Mo	TS1CG1	01-JAN-52
5	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS1	Create Mo	TS1CG1	01-JAN-52
6	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS2	Create Mo	TS2CG1	01-JAN-52
7	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS2	Create Mo	TS2CG1	01-JAN-52
8	TS4EBS	FAILED	-						
9	TS3EBS	FAILED	FND	XX_CEUI_WEB_SERVICE_INFO	CREATE_	Create TS3	Create Mo	TS3CG1	01-JAN-52
10	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	EAV	EAV	Address V	CG1PRD	01-JAN-52
11	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	EAV	EAV	Address V	CG1PRD	01-JAN-52
12	TS4EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	EAV_DV1	EAV DV1	Address V	DV1CG1	01-JAN-52
13	TS3EBS	SUCCESS	FND	XX_CEUI_WEB_SERVICE_INFO	EAV_DV1	EAV DV1	Address V	DV1CG1	01-JAN-52

Troubleshooting

Most likely if you face any problem it would be related to jre version mismatch. You can figure out by running the tool from command prompt. Go to Windows →Run

1.) Type cmd and hit Enter Key

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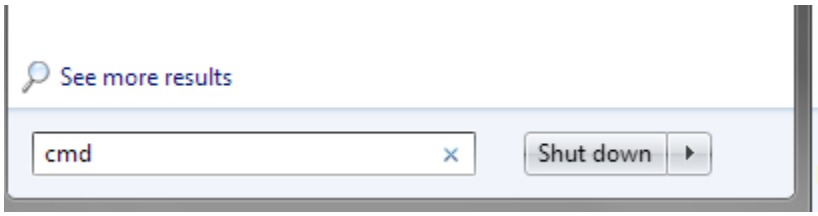
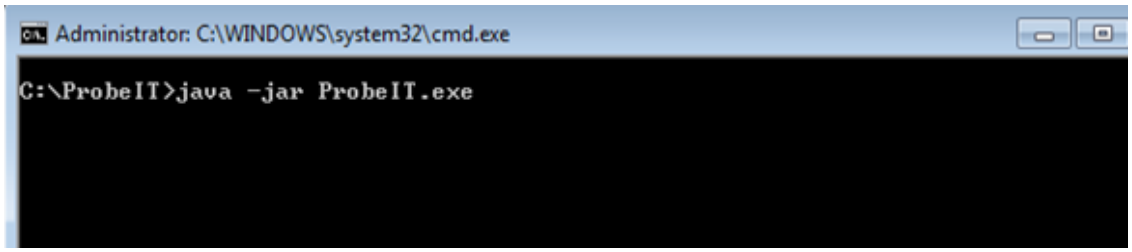


2.) cd to the folder where you installed the ProbeIT

3.) In case you see error something like below that means you don't have right jre version.



4.) Install jre version 1.7 and repeat step 1 to 5 from
http://www.oracle.com/technetwork/java/javase/downloads/jre7-downloads-1880261.html

5.) In case you face any problem and need help send email to contact@tivratech.com

Pattern Search Tips

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ProbeIT uses regular expression command for pattern search, so you can use regular expression for fine tune your search based comparison. Suppose you want to compare all objects in two databases which start with “XX” and ends with “PKG” you can use ^XX(*.*)PKG$ in Pattern search field.

Some useful example

Scenario	Search Pattern
Values Starting with 'a%b'	^ab*
'a' is the third value	^..a.'
Contains two consecutive occurances of the letter 'a' or 'z'	([az])\1', 'i')
Begins with 'Ste' ends with 'en' and contains either 'v' or 'ph' in the center	^Ste(v|ph)en$'

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